



American Association of
State Highway and
Transportation Officials

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December 19, 1996

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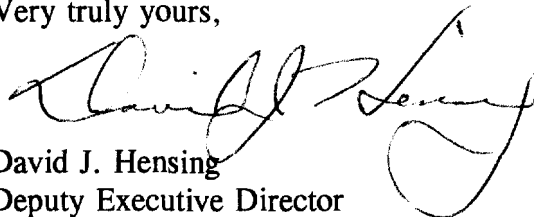
Office of the Secretary
Federal Communications Commission
Washington, D.C. 20554

Dear Sir or Madam:

Enclosed are an original and nine copies of AASHTO's reply comments on WT Docket 96-86 concerning The Development of Operational, Technical and Spectrum Requirements for Meeting Federal, State and Local Public Safety Agency Communication Requirements Through the Year 2010.

Do not hesitate to inform me should you have comments or questions regarding this submittal.

Very truly yours,



David J. Hensing
Deputy Executive Director

encl.

cc: Chester Jones
Jack Stanton
Jan Machis

DJH:LAM:tcd

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FEDERAL COMMUNICATIONS COMMISSION
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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	
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The Development of Operational)	
Technical, and Spectrum)	WT Docket No. 96-86
Requirements for Meeting)	
Federal, State and Local Public)	
Safety Agency Communication)	
Requirements Through the)	
Year 2010)	

Reply Comments of the
American Association of State Highway and Transportation Officials

Special Committee on Communications

Chester Jones, Chairman

December 19, 1996

Before the
Federal Communications Commission
Washington, D.C. 20554

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Notice of Proposed Rule Making

To: The Commission

REPLY COMMENTS

The American Association of State Highway and Transportation Officials (AASHTO) respectfully submits these reply comments to the Commission's Notice of Proposed Rule Making in the above captioned proceeding.

AASHTO is the national association of the state departments of highways and transportation in the 50 states, the District of Columbia and Puerto Rico. Its scope includes all five principal transportation modes, and its major purpose is to foster development, operation and maintenance of an integrated national transportation system.

AASHTO, through its Special Committee on Communications, has been involved in matters related to radio frequency communications and associated systems for more than 40 years. AASHTO serves as the Commission's certified frequency coordinator for the Highway Maintenance Radio Service. AASHTO is an active member of the Intelligent Transportation Society of America (ITSA) with membership on many ITSA committees, including the ITSA Telecommunications Committee.

POSITION STATEMENT

In this proceeding, the Commission seeks to address the present deficiencies in public safety wireless communications as well as its expanding spectrum needs. Included in the items under consideration are: current lack of interoperability, minimal access to emerging technologies, limited service feature options, less than optimal transmission and reception quality, as well as the lack of available spectrum.

The record in this matter contains positions of many diverse segments of both wireless system users as well as manufacturers and other professional organizations. A review of the positions on file has resulted in the following statements which seek to present the position of the nation's transportation community on the issues addressed by the comments.

AASHTO, as stated in its comments, generally supports the findings and positions contained in the Public Safety Wireless Advisory Committee's (PSWAC) Final Report to the Commission.

The comments reviewed by AASHTO include areas for which AASHTO has both supporting and dissenting positions.

Block Grant Spectrum Allocations

Radio spectrum is a resource which does not respect boundaries defined by governmental entities. Unless unique blocks of spectrum are allocated to neighboring areas, problems of frequency reuse would still require coordination on national and international levels. Disputes crossing boundaries would be beyond the capability of local entities to resolve them. Because of this, we believe the assignment of spectrum through block grants to have little merit.

Frequency Coordination

AASHTO agrees with the comments of the IMSA which note that the current frequency coordinators are neutral third party organizations currently charged with helping the Commission in assigning and administering private land mobile radio frequency assignments.¹ APCO also

¹See Comments of the International Municipal Signal Association and the International Association of Fire Chiefs, Inc., (submitted to FCC on Oct. 21, 1996) at 6.

supports the continuation of the current frequency coordination procedures.² The state of California, Department of General Services, (CDOGS) is responsible for FCC licensing of all radio stations used by state agencies and for spectrum management³. AASHTO concurs with CDOGS in their findings that the funding cycles unique to state and other governmental entities greatly exceed the time required by the current spectrum allocation and administrative processes.⁴ The CDOGS further state that they are quite satisfied with the current system of frequency coordinators.⁵

There are, however, other organizations which do support change in the current frequency coordination procedures. The state of Ohio, Department of Administrative Services, (ODOAS) suggests that APCO be given a larger role in Spectrum Administration, since, according to ODOAS, the Commission has "been satisfied with their overall performance." ODOAS, however, also states that the same might be true of the other service coordinators, although "we have no firsthand knowledge of their service records".^{6,7} This would seem to weaken the ODOAS suggestion.

The Minnesota Department of Transportation, Office of Electronic Communications (MOEC), is responsible for State government public safety communications systems in the state

²See Comments of the Association of Public-Safety Communications Officials-International, Inc. (submitted to the FCC on October 21, 1996) at 27.

³See Comments of the California Department of General Services, (undated) at 21.

⁴Ibid..

⁵Ibid.

⁶See Comments of the Ohio Department of Administrative Services, (submitted to the FCC on October 21, 1996) at paragraph 93.

⁷Ibid.

of Minnesota. MOEC provides a detailed description of the current Public Safety Spectrum Administration Policies.⁸ MOEC concludes their description with a recommendation that a single coordinator be appointed for all Public Safety Radio Services. The principal basis for this recommendation appears to be reduced application processing times. However, AASHTO's record with respect to all requests received from other frequency coordinators is that 98 percent of those requests are completed in 20 working days or less. In some cases the original recommendation of the "out of service" coordinator is denied by AASHTO because of potential interference. In such cases, usually a different frequency is recommended by AASHTO for which there will be no interference. This process is of significant benefit to the radio system applicant, who, through the efforts and expertise of AASHTO, does not receive a frequency assignment which would have resulted in interference not only to existing users but to his own system. In any case, the time delays introduced by requiring concurrence from all affected radio service coordinators should not exceed 20 working days -- a time period which, as noted by the California Department of General Services, is far less than the time required to acquire and install equipment.⁹

MOES further suggests that the frequency coordination process for frequencies in the 800 MHz band is more efficient since it only requires review and processing by one frequency coordinator. While few transportation agencies operate systems in this band, AASHTO is aware of a case in which the Nevada Department of Transportation (Department) is installing a shared system which involves other public safety and non-public safety organizations. The Department

⁸See Comments of the Minnesota Department of Transportation (submitted to the FCC on October 31, 1996) at 17-19.

⁹See Comments of the California Department of General Services (October 21, 1996) at 21.

has experienced significant difficulties in obtaining expeditious service with respect to frequency coordination and application processing for this system. While only one case, this experience would indicate that the naming of a single coordinator does not necessarily result in a more efficient system.

We agree with the comments of the Ohio Department of Administrative Services that post-licensing coordination would not improve the current process.¹⁰ The Commission does have options through which the licensing process could be improved, such as electronic filing of applications -- a procedure which has been discussed for over five years. If implemented, it could easily result in the desired speed of service reduction.

Interoperability

AASHTO agrees with the IMSA that interoperability is desirable and in many cases critical.^{11,12} The lack of a universal desire for interoperability limits the prospects for widespread acceptance of this concept. The Commission's rules should encourage the growth of shared systems and interoperability by making spectrum available for such uses.

¹⁰See Comments by the Ohio Department of Administrative Services (undated) at paragraph 94.

¹¹See Comments of International Municipal Signal Association and the International Association of Fire Chiefs, Inc. (submitted to the FCC on Oct. 21, 1996) at 12-15.

¹²Ibid., at 10-11.

Commercial Systems

As stated in our comments and supported by IMSA, commercial systems such as cellular telephone systems are applicable for many routine services but cannot be depended upon to provide reliable communications in times of critical needs.¹³ State transportation agencies need to communicate with the workforce over an entire state. Some commercial service providers serve only the densely populated areas of states and these would not be suitable for such statewide operations.

Technology Issues

The Commission seeks comments on a variety of modulation techniques and other related technical issues. The record of comments regarding these features is varied. The city of Mesa, Arizona supports APCO Project 25 standards and Frequency Division Multiple Access (FDMA) modulation.¹⁴ Mesa further states that it believes that Time Division Multiple Access (TDMA) and Code Division Multiple Access (CDMA) are risky options for Public Safety.¹⁵ Mesa also states that it knows of no Public Safety organization who would volunteer to provision such a totally infrastructure-dependent system as TDMA or CDMA.¹⁶

¹³See Comments of the City of Mesa, Arizona (undated), at 14-15.

¹⁴Ibid., at 15.

¹⁵Ibid., at 15.

¹⁶Ibid., at 15.

AASHTO does not concur with the Mesa position. We are aware, for instance, that the state of Nevada, Department of Transportation, is currently constructing a statewide communications system which utilizes TDMA technology. This system involves multiple state and federal governmental agencies as well as utilities and could serve as a model of shared resources which result in benefits to all participants. One of the reasons for the choice of TDMA for this system was the relatively simple path for conversion to narrowband (6.25 kHz channel bandwidth) for TDMA systems. This feature is especially important when the Commission seeks to maximize the number of channels per spectrum block.

Improving Public Safety Spectrum Administration

The Commission has proposed the electronic filing of radio station applications by frequency coordinators as a method of expediting service. To date, this process has been tested with a limited number of participants. We believe that the implementation of such a program would assist the Commission by reducing its workload for data entry and processing of paper copies and application forms.

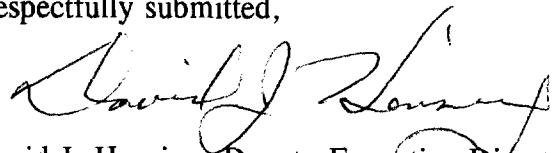
CONCLUSION

AASHTO supports the concept of a spectrum allocation to support and enable all public safety organizations to fulfill their duties to our nation's citizens. This allocation must be accompanied by a regulatory structure which ensures efficient spectrum usage to the user.

The current system of representative frequency coordinators is the only process by which all potential and existing two-way radio users can be effectively protected. While some commenters suggest that a single frequency coordinator be appointed, we believe that the arguments offered in support of this view are not persuasive that any improvement to the existing system would be realized.

We respectfully request that the Commission consider these comments as it proceeds with this important undertaking.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "David J. Hensing", written in a cursive style.

David J. Hensing, Deputy Executive Director
American Association of State Highway and
Transportation Officials